REMARKS

In the outstanding non-final Office Action of July 14, 2004, the Examiner objected to the drawings under 37 CFR 1.83(a) as allegedly not showing every feature specified in the claims; objected to the specification due to alleged informalities; rejected claims 2, 3, 10, 11, 18, 21, 25, 26, 29, 31, 32, and 35 under 35 U.S.C. 112, first paragraph as allegedly failing to comply with the enabling requirement; rejected claims 1, 4, 6-9, 12, 14-17, 19-20, 22-24, 27-28, 30, and 33-34 under 35 U.S.C. 102(e) as allegedly being anticipated by U.S. Patent No. 6,317,236 to Saunders; and rejected claims 5 and 13 under 35 U.S.C. 103(a) as allegedly being unpatentable over Saunders in view of U.S. Patent No. 6,128,313 to Chapman et al. ("Chapman"). Applicants traverse the objections and the rejections to the claims.

By this amendment, Applicants amended claims 1-3, 6, 8-11, 15-22, 24-27, 29-32, and 35 to improve form and added new claim 36. Claims 1-36 are now pending.

Information Disclosure Statement of April 18, 2001

Applicants wish to thank the Examiner for returning form PTO-1449 originally submitted on April 18, 2001. Applicants note that the Examiner signed and dated form PTO-1449, but did not provide his initials in the appropriate spaces to indicate that each document had been considered. Applicants believe that the omission of the Examiner's initials on the form PTO-1449 was an oversight and respectfully request the Examiner to provide his initials in the appropriate spaces of the form. Applicants are providing a duplicate copy of the form PTO-1449 for the Examiner's convenience.

Foreign Priority

Applicants note that the Examiner acknowledged a claim of foreign priority and indicated that all certified copies of priority documents have been received. However, Applicants wish to point out that the present application has no claim of foreign priority and that no certified copies of priority documents had been submitted. Applicants respectfully request that the Examiner correct the record.

Objection to the Drawings

On page 2 of the Office Action, the Examiner objected to the drawings under 37 CFR 1.83(a) because the claim terms "an abort packet" of claim 2, "a runt packet" of claim 3, "an abort packet preparing element" of claim 10, "a runt packet preparing element" of claim of claim 11, "runt analyzer" and "discarding element" of claim 21, "an extractor" of claim 22, "creating an abort packet" of claim 25, "creating a runt packet" of claim 26, "abort packet element" of claim 31, "a runt packet element" of claim 33, and "a runt packet determining element" of claim 35 are not shown. The Examiner requested that the features be canceled from the claims or shown in the drawings.

Applicants amended the claims to more clearly recite the features. For example, claim 2 now recites "a runt abort packet." Claim 3 now refers to "a runt abort packet." Claim 10 now recites "a runt abort packet preparing element," an example of which is shown in Fig. 2. Claim 11 was amended to eliminate the term "a runt packet preparing element." Claim 21 was amended to recite "a checker" instead of "a runt analyzer." An example of a checker is illustrated in Fig. 4. Claim 22 was amended to recite "a remover for discarding...," an example of which is illustrated in Fig. 4. Claim 25 was amended to recite "creating a runt abort packet." Claim 26 was amended to recite "creating a runt

abort packet..." Claim 31 was amended to recite "a runt abort packet element." These features are illustrated in Fig. 2.

Claim 33 did not recite "a runt packet element" as stated in the Office Action. Applicant believes that the Examiner meant to refer to claim 32 which did recite this feature. Applicant amended claim 32 to cite "a runt abort packet element," which is illustrated, for example, in Fig. 2.

Applicants did not cancel the term "a discarding element" from claim 21 because this element is illustrated, for example, in Fig. 4.

With respect to Fig. 5, Applicants submit that the descrambling elements of Fig. 5 are not prior art. Fig. 5 shows the descrambling elements receiving scrambled incoming data from an HDLC abort and flag check. The prior art does not disclose the descrambling elements receiving scrambled incoming data from an HDLC abort and flag check.

For the reasons discussed above, Applicants respectfully request that the objection to the drawings be withdrawn.

Objection to the Specification

On pages 3-4 of the outstanding Office Action, the Examiner objected to the specification because of alleged informalities. Applicants amended the specification, at page 8, line 21, and page 9, line 17, as suggested by the Examiner.

With respect to page 9, lines 9-10, Applicants submit that the phrase "other elements for processing" is not indefinite. The phrase is included to indicate that that the

elements of HDLC descrambler 82, shown in Fig. 5, are not limited to only the elements shown in Fig. 5, but may contain additional elements.

With respect to "EOR" of Fig. 5, Applicants submit that the term "EOR" is a term well known to those of ordinary skill in the art as indicating an "exclusive-or" operation. The term "EOR" has not been changed in Fig. 5.

With respect to page 8, line 29, Applicants, as discussed above, submit that the descrambling elements of Fig. 5 are not prior art. Fig. 5 shows the descrambling elements receiving scrambled incoming data from an HDLC abort and flag check. The prior art does not disclose the descrambling elements receiving scrambled incoming data from an HDLC abort and flag check. Further, Applicants submit that the descrambler of Fig. 5 is not limited to that which is disclosed in Merchant. Therefore, a reference to the Merchant reference has not been included in the specification.

On page 3 of the Office Action, the Examiner indicated that the specification allegedly failed to provide proper antecedent basis for the claimed subject matter. In particular, the Examiner cited "an abort packet preparing element" of claim 10, "a runt packet preparing element" of claim 11, "runt analyzer" and "discarding element" of claim 21, "abort packet element" of claim 31, "runt packet element" of claim 32 (the office action erroneously attributes this to claim 33), and "a runt packet determining element" and "runt packet" of claim 35.

Applicants amended the claims to more clearly recite the features. For example, claim 10 now recites "a runt abort packet preparing element," an example of which is shown in the specification at page 7, lines 8-13 and Fig. 2. Claim 11 was amended to eliminate the term "a runt packet preparing element." Claim 21 was amended to recite "a

checker" instead of "a runt analyzer." An example of a checker is described in the specification at page 8, lines 25-27 and Fig. 4. Claim 31 was amended to recite "a runt abort packet element," an example of which is described in the specification at page 7, lines 14-17 and Fig. 2. Applicants amended claim 32 to refer to "a runt abort packet element." Claim 35 was amended to recite "a runt abort packet determining element," an example of which is described in the specification at page 8, line 25 through page 9, line 5 and Fig. 4.

Applicants did not cancel the term "a discarding element" from claim 21 because the specification, at page 9, lines 1-2 and Fig. 4 provide an example of a discarding element.

Applicants submit that the amended specification and claims clarify the disclosure. Applicants, therefore, respectfully request that the objection to the disclosure be withdrawn.

Rejection Under 35 U.S.C. § 112

On pages 4-5 of the outstanding Office Action, the Examiner rejected claims 2, 3, 10, 11, 18, 21, 25, 26, 29, 31, 32, and 35 under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the enablement requirement.

Applicants amended the claims to more clearly recite the features. For example, claim 2 now recites "a runt abort packet." An example of a runt abort packet is defined in the specification at page 5, lines 23-30. Claim 3 now refers to "a runt abort packet." Claim 10 now recites "a runt abort packet preparing element," an example of which is shown in the specification at page 7, lines 8-13 and Fig. 2. Claim 11 was amended to

eliminate the term "a runt packet preparing element." Claim 21 was amended to recite "a checker" instead of "a runt analyzer." An example of a checker is described in the specification at page 8, lines 25-27 and Fig. 4. Claim 25 was amended to recite "creating a runt abort packet." Claim 26 was amended to recite "creating a runt abort packet..." Claim 29 was amended to recite "determining the idle time synchronization packet is a runt abort packet." Claim 31 was amended to recite "a runt abort packet element." Applicant amended claim 32 to refer to "a runt abort packet element."

Applicants did not cancel the term "a discarding element" from claim 21 because the specification, at page 9, lines 1-2 and Fig. 4 provide an example of a discarding element.

Applicants believe that one of ordinary skill in the art would be able to make and use the claimed invention as all terms are adequately described in the specification. For at least the reasons discussed above, Applicants respectfully request that the rejection be withdrawn.

Further, Applicants note that the above claims were not rejected over the prior art. Applicants submit that the Examiner did not reject claims 2, 3, 10, 11, 18, 21, 25, 26, 29, 31, 32, and 35 over the prior art because these claims are patentable.

Rejection of Claims 1, 4, 6-9, 12, 14-17, 19-20, 22-24, 27-28, 30, and 33-34

On page 6 of the outstanding Office Action, The Examiner rejected claims 1, 4, 6-9, 12, 14-17, 19-20, 22-24, 27-28, 30, and 33-34 under 35 U.S.C. 102(e) as allegedly being anticipated by Saunders. Applicants traverse the rejection.

Amended claim 1 recites a method of processing data in a data transmitting system. The method includes forwarding data for further processing in the data transmitting system when data is being received, generating idle time synchronizing information during idle time when data is not being received, where the idle time synchronizing information is for synchronizing a data receiving system with the data transmitting system. The generating idle time synchronizing information includes preparing a runt abort packet. The method further includes generating packet information by processing the data and the idle time synchronizing information in accordance with a packet protocol.

A proper rejection under 35 U.S.C. § 102 requires that a reference teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. See M.P.E.P. § 2131. Saunders. does not disclose or suggest the combination of features recited in Applicants' claim 1.

For example, Saunders does not disclose or suggest the generating idle time synchronizing information including preparing a runt abort packet. Saunders is completely silent regarding this feature.

Applicants submit that because Saunders does not disclose each and every feature of claim 1, claim 1 is not anticipated by Saunders. Applicants, therefore, respectfully request that the rejection of claim 1 be withdrawn.

Claims 4 and 6-8 depend from claim 1 and are not anticipated by Saunders at least for the reasons provided with respect to claim 1. Therefore, Applicants respectfully request that the rejection of claims 4 and 6-8 be withdrawn.

Amended independent claim 9 recites an apparatus for processing data in a data transmitting system. The apparatus includes a data element and a packet processing element. The data element is for forwarding data for further processing in the data transmitting system when data is received and for creating idle time synchronizing information during idle time when data is not received. The idle time synchronizing information is for synchronizing a data receiving system with the data transmitting system and placing the data receiving system in a correct state with respect to whether an inter-frame time fill byte or a data byte is being received. The packet processing element is for creating packet information by processing the data and the idle time synchronizing information in accordance with a packet protocol.

Applicant submits that Saunders does not disclose or suggest each and every feature of claim 9. For example, Saunders does not disclose or suggest a data element for creating idle time synchronizing information during idle time when data is not being received, where the idle time synchronizing is for placing the data receiving system in a correct state with respect to whether an inter-frame time fill byte or a data byte is being received, as recited in claim 9.

On page 6 of the Office Action, the Examiner asserted that Saunders, at column 3, lines 27-30, discloses the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system.

Saunders, at column 3, lines 27-30 discloses, "In the idle state, the IP router must transmit some type of signal in order to maintain a synchronous clock at the receiver. Thus, the IP router typically transmits a filler signal during the idle state." The cited portion of Saunders, as well as any other portion of Saunders does not disclose or suggest

a data element for creating idle time synchronizing information during idle time when data is not being received, where the idle time synchronizing information is for placing the data receiving system in a correct state with respect to whether an inter-frame time fill byte or a data byte is being received, as recited in claim 9. For at least this reason, Applicants submit that Saunders does not anticipate claim 9 and respectfully request that the rejection of claim 9 be withdrawn.

Claims 12 and 14-16 depend from claim 9 and are not anticipated by Saunders at least for the reasons provided with respect to claim 9. Therefore, Applicants respectfully request that the rejection of claims 12 and 14-16 be withdrawn.

Amended independent claim 17 recites a method for receiving data at a data receiving system. The method includes receiving an idle time synchronizing packet that was generated by a transmitting system during idle time at the transmitting system and synchronizing the data receiving system with the transmitting system by processing the idle time synchronizing packet, where the processing the idle time synchronizing packet causes the data receiving system to be in a correct state with respect to whether an inter-frame time fill byte or a data byte is being received.

Applicants submit that claim 17 is similar to claim 9 and is not anticipated by Saunders for reasons similar to those provided with respect to claim 9. Therefore, Applicants respectfully request that the rejection of claim 17 be withdrawn.

Claim 19 depends from claim 17 and is not anticipated for at least the reasons provided above with respect to claim 17. Applicants, therefore, respectfully request that the rejection of claim 19 be withdrawn.

Amended independent claim 20 recites an apparatus for receiving data at a data receiving system. The apparatus includes a receiver and a processing element. The receiver is for receiving an idle time synchronizing packet that was generated by a transmitting system during idle time at the transmitting system. The processing element is for synchronizing the receiving system with the transmitting system by processing the idle time synchronizing packet. The processing element is configured to place the apparatus in a correct state with respect to whether an inter-frame time fill byte or a data byte is being received.

Applicants submit that claim 20 is similar to claims 9 and 17 and that claim 20 is not anticipated by Saunders for reasons similar to those provided with respect to claims 9 and 17. Therefore, Applicants respectfully request that the rejection of claim 20 be withdrawn.

Claims 22 and 23 depend from claim 20 and are not anticipated by Saunders for at least the reasons provided with respect to claim 20. Applicants, therefore, respectfully request that the rejection of claims 22 and 23 be withdrawn.

Amended independent claim 24 recites a method for synchronizing a transmitting system with a receiving system. The method includes forwarding data from the transmitting system to the receiving system when data is being received by the transmitting system, creating an idle time synchronizing packet during idle time when the transmitting system is not receiving data, forwarding the idle time synchronization packet to the receiving system, and processing the idle time synchronization packet at the receiving system to synchronize the receiving system with the transmitting system. The processing the idle time synchronization packet further includes causing the receiving

system to be placed in a correct state with respect to whether an inter-frame time fill byte or a data byte is being received.

Applicants submit that claim 24 is similar to claims 9, 17 and 20 and that Saunders does not anticipate claim 24 for reasons similar to those provided with respect to claims 9, 17 and 20. Therefore, Applicants respectfully request that the rejection of claim 24 be withdrawn.

Claims 27 and 28 depend from claim 24 and are not anticipated for at least the reasons provided with respect to claim 24. Therefore, Applicants respectfully request that the rejection of claims 27 and 28 be withdrawn.

Amended independent claim 30 recites a system for synchronizing a transmitting system with a receiving system. The system includes a data element, a forwarding element and a receiver processing element. The data element is for forwarding data from the transmitting system to the receiving system when data is being received by the transmitting system and for creating an idle time synchronizing packet during idle time when the transmitting system is not receiving data. The forwarding element is for forwarding the idle time synchronization packet to the receiving system. The receiver processing element is for processing the idle time synchronization packet at the receiving system to synchronize the receiving system with the transmitting system. The receiver processing element is configured to place the receiving system in a correct state with respect to whether an inter-frame time fill byte or a data byte is being received.

Applicants submit that claim 30 is similar to claims 9, 17, 20, and 24 and that claim 30 is not anticipated by Saunders for reasons similar to those provided with respect

to claims 9, 17, 20, and 24. Therefore, Applicants respectfully request that the rejection of claim 30 be withdrawn.

Claims 33 and 34 depend from claim 30 and are not anticipated by Saunders for at least the reasons provided with respect to claim 30. Therefore, Applicants respectfully request that the rejection of claims 33 and 34 be withdrawn.

Rejection of Claims 5 and 13

On page 11 of the outstanding Office Action, the Examiner rejected claims 5 and 13 under 35 U.S.C. 103(a) as allegedly being unpatentable over Saunders in view of Chapman. Applicants respectfully traverse the rejection.

Claim 5 depends from claim 1, which recites generating idle time synchronization including preparing a runt abort packet. As discussed previously, with respect to claim 1, Saunders does not disclose or suggest such a feature. Chapman also fails to satisfy the deficiencies of Saunders, with respect to claim 1. For at least these reasons, Applicants respectfully request that the rejection of claim 5 be withdrawn.

Claim 13 depends from claim 9, which recites a data element for creating idle time synchronizing information during idle time when data is not received, where the time synchronizing information is for placing the data receiving system in a correct state when the data receiving system is in an incorrect state at a time when the idle time synchronizing information is received. For the reasons discussed above with respect to claim 9, Applicants submit that Saunders does not disclose or suggest this feature. Applicants further submit that Chapman fails to satisfy the deficiencies of Saunders, with

respect to claim 9. For at least the reasons discussed above, Applicants respectfully request that the rejection of claim 13 be withdrawn.

New Claim 36

New claim 36 is directed to a method for receiving data at a data receiving system. The method includes receiving a synchronizing packet generated by a data transmitting system, determining whether the synchronizing packet includes a runt abort packet, synchronizing the data receiving system with the data transmitting system, and setting a state of the data receiving system to a correct state with respect to whether an inter-frame time fill byte or a data byte is being received when the determining determines that the idle time synchronizing packet includes a runt abort packet. Applicants submit that the cited references do not disclose or suggest the claimed combination of elements recited in claim 36.

Conclusion

Applicant submits that the application is now in condition for allowance, and notice to that effect is earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Attachments:
Annotated and Replacement Fig. 5
PTO-1449 filed April 18, 2001

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APPLICATION 09/752,828
ANNOTATED FIGURE

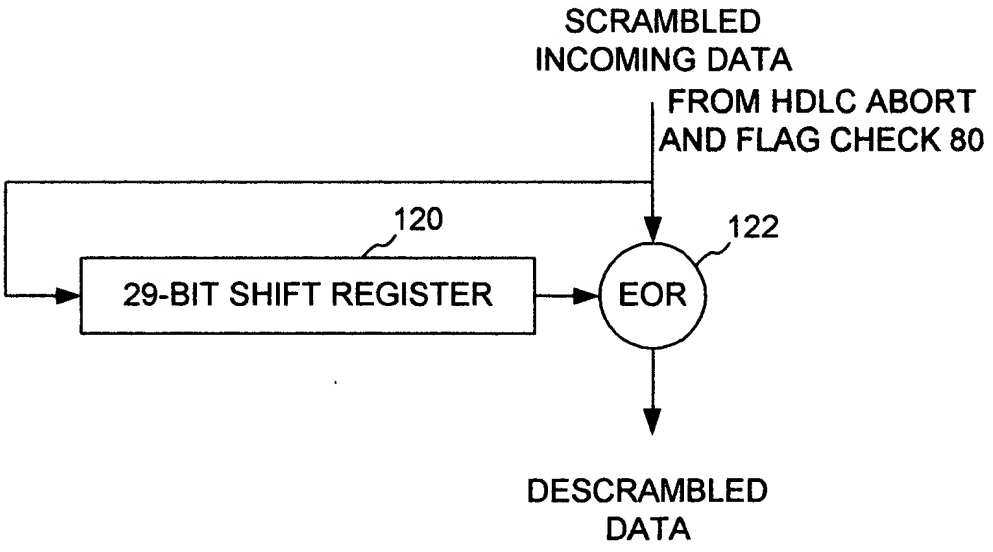

FIG. 5

INFORMATION DISCLOSURE CITATION

PTO-1449

ATTORNEY'S DKT NO.	APPLICATION NO.
0023-0026	09/752,828
APPLICANT: Dennis C. FERGUSON et al.	
FILING DATE: January 3, 2001	GROUP: 2661

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE

FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation Yes	Translation No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	W. Simpson; "PPP in HDLC-like Framing;" July 1994; pgs. 1-23.
	S. Merchant; "PPP over SONET (SDH) at Rates from STS-1 (AU-3) to STS-192c (AU-4-64c/STM-64);" November 1998; pgs. 1-14.
	D. Ferguson et al.; "Self-Synchronous Scramblers For PPP Over Sonet/SDH: Some Analysis;" November 1997; pgs. 1-18.
	A. Malis et al.; "PPP over SONET/SDH;" June 1999; pgs. 1-9.
	J. Manchester et al.; "Enabling Transparency for the PPP over SONET/SDH Mapping;" November 21, 1997; pgs. 1-6.
	J. Carlson et al.; "PPP over Simple Data Link (SDL) Using Raw Lightware Channels With ATM-like Framing;" June 1999; pgs. 1-18.
	Hewlett-Packard Company; "Packet Over SONET/SDH: An Efficient, Cost-effective Alternative to ATM;" © 1999; pgs. 1-4.
	J. Carlson et al.; "PPP over Simple Data Link (SDL) using SONET/SDH with ATM-like framing;" May 2000; pgs. 1-21.
	Optical Networking News and Analysis; "SONET;" © 2000 Phillips Business Information LLC; pgs. 1-4.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.